

**REMARKS**

Claims 1-4, 6-9, 11-19, and 21-30 are currently pending in this application. By virtue of this amendment, claims 5 and 10 have been cancelled, claims 1-4, 8-9, and 11-19 have been amended, and new claims 21-30 have been added.

Applicants note with appreciation the indication by the Examiner that claim 7 is objected to as being dependent on a rejected base claim but would be allowable if rewritten in independent form.

**Oath/Declaration**

A supplemental declaration is being submitted concurrently herewith to correct the defects noted by the Examiner. As set forth in 37 C.F.R. §1.67(a)(2), the supplemental declaration identifies the entire inventive entity but is signed only by the inventor, Lisa Harrison, to whom the error relates.

**Informalities**

Applicants note that the specification was objected to because it contains an embedded hyperlink. In response, Applicant has amended the disclosure to delete the embedded hyperlink.

**Claim Rejections Under 35 U.S.C §112**

Claims 1-6 and 8-19 stand rejected under 35 U.S.C. §112, 1<sup>st</sup> paragraph because the specification, while being enabling for a polypeptide of SEQ ID NO: 2, does not reasonably provide enablement for 1) a fragment or variant of SEQ ID NO: 2; 2) a purified polypeptide isolated or cloned from a hookworm where the sequence of the polypeptide is not defined; 3) a composition or pharmaceutical composition comprising the polypeptide; and 4) a method for treating a patient by administering a hookworm polypeptide where the disease is not identified. The Examiner asserts that the application provides no indicia and no teaching/guidance as to how the full scope of the claims is

enabled. The Examiner asserts that the specification has not identified a specific variant or fragment of SEQ ID NO: 2 exhibiting at least 50% sequence homology to the naturally occurring polypeptide.

As described in Applicants' specification, the polypeptide of the invention inhibits platelet aggregation and adhesion in response to a variety of agonists, by interfering with the binding of at least one cell surface integrin with its respective ligand(s) (Specification, page 3).

Applicants have amended claim 1 to require the purified polypeptide shown in SEQ ID NO: 2 or a fragment or variant thereof exhibiting at least 95% homology to the purified polypeptide. As set forth in Example 14 of the USPTO training materials (pp. 53-55) found at <http://www.uspto.gov/web/offices/pac/writtendesc.pdf>, procedures for making variants of the identified sequence that have 95% identity to the listed sequence and retain its activity are conventional in the art.

Applicants have also amended claims 8, 9, 17, and 18 to more clearly define the features of the invention relating to the pharmaceutical composition using the purified polypeptide of the invention and the method for treating a patient using the purified polypeptide of the invention. In particular, these claims were amended to state that the composition is used to inhibit at least one of platelet aggregation and platelet adhesion, and to define the composition as including an effective amount of the purified polypeptide of the invention mixed with a suitable carrier and various optional ingredients.

The Examiner asserts that the application does not provide any guidance a specific polypeptide isolated or cloned from a hookworm other than SEQ ID NO: 2, which inhibits platelet function. In response, Applicant has amended claims 12 to require a purified polypeptide isolated or cloned from hookworms selected from the group

consisting of *Ancylostoma duodenale*, *Ancylostoma ceylanicum*, *Necator americanus*, and *Ancylostoma caninum*, which interferes with the binding of at least one cell surface integrin with its respective ligands, having a molecular weight of about 15 to about 25 kDa. Additional hookworm species were also added to claim 12. These additional species are described on page 6 of the specification.

Applicants believe that these amendments to the claim are sufficient to overcome the Examiner's rejections under 35 U.S.C. §112, first paragraph. Reconsideration and withdrawal of the rejection of claims 1-6 and 8-19 under 35 U.S.C. §112, 1<sup>st</sup> paragraph, is respectfully requested.

Claims 1-11, 14-16 and 18 stand rejected under 35 U.S.C. §112, second paragraph for failing to point out and distinctly claim the subject matter of the invention.

Claims 1-11 were regarded as indefinite because of the use of the term "at least about" in claim 1. In response, Applicants have amended claim 1 to use the term about 95% or greater, as suggested by the Examiner.

Claims 5, 9, and 18 were also regarded by the Examiner as indefinite and have been cancelled in this response.

Claims 14-16 were regarded as indefinite for not spelling out the terms GP and ADP. In response, Applicants have amended the claims to spell out these terms.

### CONCLUSION

Applicants believe that the foregoing is a full and complete response to the Office Action of record. Accordingly, an early and favorable reconsideration of the rejection of the claims is requested. Applicants believe that claims 1-4, 6-9, 11-19, and 21-30 are

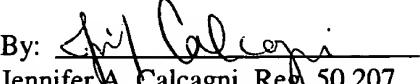
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now in condition for allowance and an indication of allowability and an early Notice of Allowance of all of the claims is respectfully requested.

If Examiner feels that a telephonic interview would be helpful, she is requested to call the undersigned at (203) 575-2648.

Respectfully submitted,

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